

AMENDMENTS TO THE CLAIMS

Please amend claims 1 and 6-10 and add claims 11-14 as follows:

1. (Currently amended) An intrinsically safe portable device for configuring the operation of a ~~level-measurement~~ a time of flight ranging system for making level measurements, said level ~~measurement~~ time of flight ranging system having a wireless communication receiver, said device comprising:

(a) an enclosure;

(b) an electronic circuit mounted in said enclosure, said electronic circuit including a low voltage power supply and a low power microcontroller for operating at a low voltage level to eliminate the incidence of sparking;

(c) a keypad coupled to said electronic circuit; and

(d) a wireless transmitter responsive to said electronic circuit and operative to transmit control signals to the wireless communication receiver on the ~~level-measurement~~ time of flight ranging system for controlling parameters of the ~~level-measurement~~ time of flight ranging system.

2. (Original) The intrinsically safe portable device as claimed in claim 1, wherein said electronic circuit is encased in an epoxy inside of said enclosure, said epoxy providing a barrier against sparking in the electronic circuitry.

3. (Original) The intrinsically safe portable device as claimed in claim 2, wherein said enclosure is formed from general polymers polystyrene having a maximum surface resistivity of $5,000E+3$ Ohms.

4. (Original) The intrinsically safe portable device as claimed in claim 1, wherein said wireless transmitter comprises an infrared transmitter.

5. (Original) The intrinsically safe portable device as claimed in claim 4, wherein said electronic circuit operates at a nominal voltage of 3 volts, and said low voltage power supply comprises a single cell lithium battery.

6. (Currently amended) A ~~level-measurement~~ time of flight ranging system for measuring the level of material in a container, said ~~level-measurement~~ time of flight ranging system comprising:

(a) a time of flight ranging ~~level-measurement~~ device having a wireless communication receiver, said ~~level-measurement~~ time of flight ranging device having configurable parameters; and

(b) an intrinsically safe portable device, including

(i) an enclosure,

(ii) an electronic circuit mounted in said enclosure, said electronic circuit including a low voltage power supply and a low power microcontroller for operating at a low voltage level to eliminate the incidence of sparking,

(iii) a keypad coupled to said electronic circuit, and

(iv) a wireless transmitter responsive to said electronic circuit and operative to transmit control signals to said wireless communication receiver on said ~~level-measurement~~ time of flight ranging device for controlling said configurable parameters.

7. (Currently amended) The ~~level-measurement~~ time of flight ranging system as claimed in claim 6, wherein said electronic circuit is encased in an epoxy inside of said enclosure, said epoxy providing a barrier against sparking in the electronic circuitry.

8. (Currently amended) The ~~level-measurement~~ time of flight ranging system as claimed in claim 7, wherein said enclosure is

formed from general polymers polystyrene having a maximum surface resistivity of $5,000E+03$ Ohms.

9. (Currently amended) The ~~level-measurement~~ time of flight ranging system as claimed in claim 6, wherein said wireless transmitter comprises an infrared transmitter.

10. (Currently amended) The ~~level-measurement~~ time of flight ranging system as claimed in claim 9, wherein said electronic circuit operates at a nominal voltage of 3 volts, and said low voltage power supply comprises a single cell lithium battery.

11. (New) The intrinsically safe portable device as claimed in claim 1, wherein said wireless transmitter comprises a radio transmitter.

12. (New) The time of flight ranging system as claimed in claim 6, wherein said wireless transmitter comprises a radio transmitter.

13. (New) The intrinsically safe portable device as claimed in claim 1, wherein said intrinsically safe portable device is configured to operate on enclosed electronic process control devices without keypads and control panels.

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14. (New) The time of flight ranging system as claimed in claim 6, wherein said time of flight ranging device is configured to use reflected energy pulses to determine a distance to a surface of a liquid or granular material.